

Casey County, Kentucky Tornado
April 3, 2007

On Wednesday, April 4, 2007, National Weather Service meteorologists conducted a storm damage survey in Casey County, Kentucky, confirming that a tornado of category 1 intensity on the Enhanced Fujita scale (EF-1) occurred during the evening of Tuesday, April 3, 2007. The meteorologists were accompanied by Casey County Emergency Manager Rick Wesley and Kentucky Division of Emergency Management Area Manager Don Franklin.

The tornado touched down about 4 miles northwest of Dunnville and moved in an east-southeast direction near Evona and Mintonville to just beyond the Pulaski county line, lifting at least twice in its 13.5 mile long path. Initial visual determination was that the tornado primarily skipped along ridgetops, and was intermingled with straight-line winds along and near its path. Upon further review of radar data from this time frame, however, it is now believed that the straight-line wind damage observed can be attributed to the tornadic circulation widening – and simultaneously decreasing in velocity – at times.

The peak tornado intensity determined from the associated damage was near the upper end of the EF-1 level (86-110 mph), with an estimated maximum wind speed of approximately 105 mph. This occurred just after the initial touchdown of the twister, and along the Casey/Pulaski County line, just before its dissipation. At the western part of the tornado's track, a large barn was moved 30 feet off its 8' high cement block foundation, with nearly 2/3 of the foundation collapsing. On the eastern end of the track, two large homes and a large, well-constructed barn lost large sections of their roofs. The entire southern wall of one of the homes was pulled out an inch away from the rest of the structure.

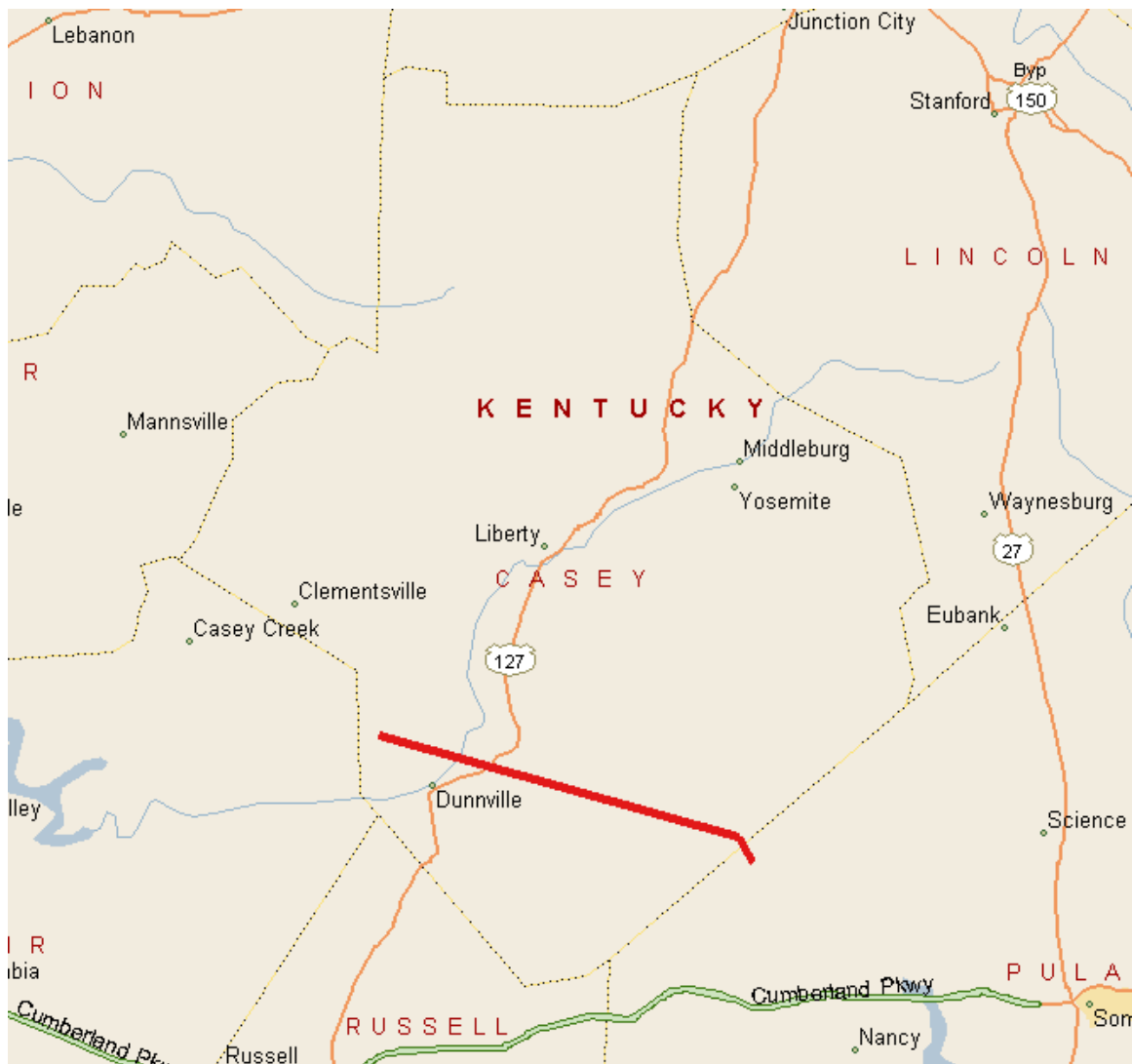
The initial touchdown of the tornado – at approximately 8:23 pm EDT – was observed by one resident 2 ¼ miles northwest of Dunnville who took shelter with his two parents in the interior hallway of their home, which lost much of its roof and brick chimney. Based on National Weather Service Doppler Radar information, the tornado raced east-southeast at 54 mph, dissipating at approximately 8:37 pm EDT less than 1 mile over the county line in Pulaski County. The damage path shows that during the last 1 ½ miles it was on the ground, the tornado took a 45 degree turn to the right from its earlier path.

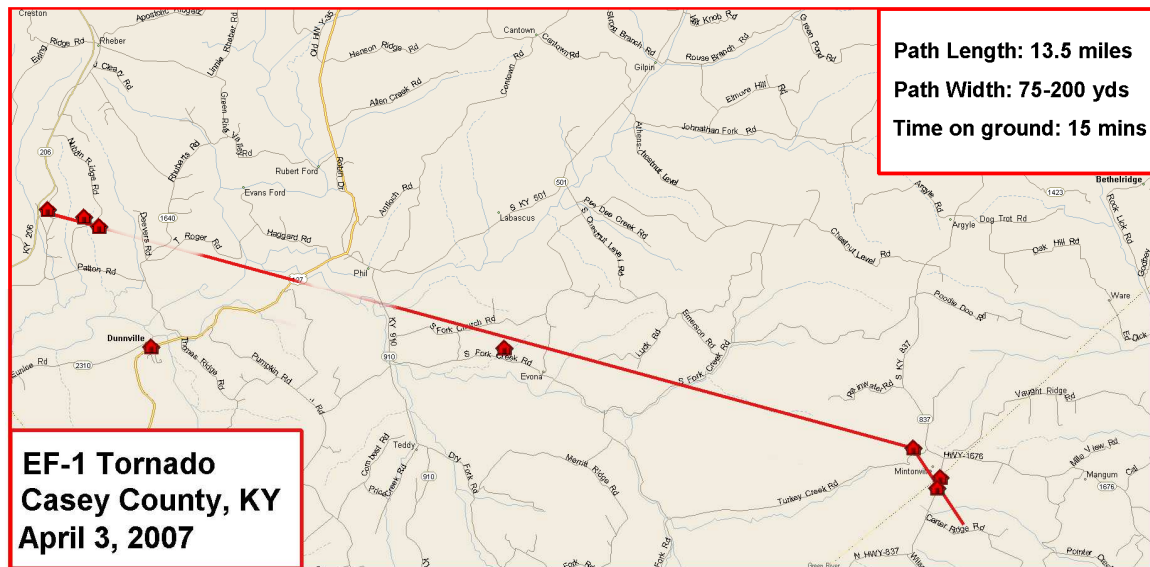
The National Weather Service in Louisville issued a Tornado Warning for Casey County at 802 pm EDT, effective until 845 pm EDT. Residents were home in at least five of the damaged homes, and all reported they had received the warning information from a variety of sources, including NOAA Weather Radio, television, local radio, and tornado sirens.

Wind damage unassociated with the tornado occurred 1.5 miles south of the tornado, in the town of Dunnville, where a large metal shed was destroyed

A brief summary of the information for this tornado follows:

Tornado Rating	EF-1
Maximum Wind Speed	105 mph (near the upper bound of EF-1)
Path Length	13.5 miles (lifted at least twice for approximately ½ mile and 1 ¾ mile during first half of path)
Path Width	varied from approximately 75 to 200 yards
Injuries	none
Fatalities	none
Time of Touchdown	approximately 823 pm EDT
Time of Dissipation	approximately 837 pm EDT





Members of the damage survey team included:

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NWS, Louisville

Mark Jarvis
Meteorologist
NWS, Louisville

Rick Wesley
Casey County Emergency Manager

Don Franklin
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Kentucky Division of Emergency Management

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